

S/N 10/763,625

Response to Office Action Dated 01 December 2005

In the Claims

1        1—37 (Cancel)

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3  
4        38. (New.) A coated substrate configured for printing a toner image  
5        thereon, comprising:

6              a substrate;

7              an underlayer coating, applied directly on the substrate, wherein the  
8        underlayer coating comprises amine terminated polyamide; and9  
10          an overlayer coating, applied directly on the underlayer coating, comprising  
11        a polymer material to which the toner image can be fused and fixed.12  
13          39. (New.) The coated substrate according to claim 38, wherein the  
14        substrate is selected from among a group of substrates comprising polyethylene,  
15        vinyl, paper, polyethylene terephthalate (PET), BOPP (biaxially oriented  
16        polypropylene film) and polycarbonate.17  
18  
19          40. (New.) The coated substrate according to claim 38 wherein the  
20        overlayer coating is free of particulate matter.21  
22  
23          41. (New.) The coated substrate according to claim 38 wherein the  
24        polymer material comprises styrene butadiene copolymer.

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1       42. (New.) The coated substrate according to claim 38 wherein the  
2 polymer material comprises ethylene acrylic acid copolymer.

3  
4       43. (New.) A print media for printing a toner image thereon,  
5 comprising:

6           a substrate coated with an underlayer having a high affinity for the  
7 substrate, and an overlayer having a high affinity for toner, wherein the underlayer  
8 and the overlayer have high affinity for each other;

9  
10          wherein the underlayer is applied directly to the substrate and comprises  
11 amine terminated polyamide; and

12          wherein the overlayer is applied directly to the underlayer and comprises a  
13 polymer material defining an outer surface to which the toner image can be fused  
14 and fixed.

15  
16       44. (New.) The print media according to claim 43, wherein the substrate  
17 is selected from among a group of substrates comprising polyethylene, vinyl,  
18 paper, polyethylene terephthalate (PET), BOPP (biaxially oriented polypropylene  
19 film) and polycarbonate.

21  
22       45. (New.) The print media according to claim 43 wherein the  
23 underlayer is free of particulate matter.  
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1       46. (New.) The print media according to claim 43 wherein the overlayer  
2       comprises styrene butadiene copolymer.

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4       47. (New.) The print media according to claim 43 wherein the overlayer  
5       comprises ethylene acrylic acid copolymer.

6  
7       48. (New.) A method of producing a coated substrate to which a toner  
8       image can be adhered, comprising:

9  
10       coating a substrate with an underlayer comprising amine terminated  
11       polyamide; and

12       coating the underlayer with a polymer material to form an overlayer on the  
13       underlayer, wherein the overlayer has a high affinity for the underlayer and an  
14       outer surface to which the toner image can be applied.

15  
16       49. (New.) The method of claim 48, wherein coating the substrate  
17       comprises:

18  
19       coating a paper substrate.

20  
21       50. (New.) The method of claim 48, wherein coating the substrate  
22       comprises:

23       coating a plastic sheet substrate.

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1       51. (New.) The method of claim 48, wherein coating the substrate  
2 comprises applying 0.1 to 0.3 grams of solids to the substrate per square meter of  
3 the substrate.

4

5       52. (New.) The method of claim 48, wherein coating the substrate  
6 comprises:

7              mixing a 19-to-1 ratio of 1-Propanal to Macromelt 6239 (Henkel);  
8              stirring the mixture; and  
9              heating the mixture to between 40 degrees C. and 50 degrees C., until a  
10             homogeneous and clear 5% solids solution is obtained.

11

12

13       53. (New.) The method of claim 48, wherein coating the substrate  
14 comprises:

15              coating the substrate with a partial solids solution; and  
16              letting the partial solids solution dry.

17

18

19       54. (New.) The method of claim 53, wherein the partial solids solution  
20 is a 5% solids solution.

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55. (New.) The method of claim 48, wherein coating the underlayer  
comprises:

3 combining deionized water and isopropyl alcohol to form a mixture;  
4 cooling the mixture; and  
5 adding the mixture to a dispersion of MP 4990.

7 56. (New.) The method of claim 55, wherein the dispersion of MP 4990  
8 is in a range of 32% to 35%.

10 57. (New.) The method of claim 48, wherein coating the underlayer  
11 comprises:

13 applying 0.3 to 0.5 grams of the polymer material per square meter of  
14 underlayer.

16 58. (New.) The method of claim 48, wherein coating the underlayer  
17 comprises:

19 drying the underlayer before applying the outerlayer.